Remarks

This application has been reviewed in light of the Office Action of March 12, 2007. Claims 1-22 are pending, and all claims are rejected. In response, the Specification is amended; claims 1, 5-10, and 15 are amended; claims 4 and 10 are canceled, without prejudice; new claims 23-24 are added; and the following remarks are submitted. Reconsideration of this application, as amended, is requested.

Ground 1. Claims 1-3 are rejected under 35 USC 103 over Roberson US Patent 6,233,088 in view of Mansell US Patent 6,493,123. Applicant traverses this ground of rejection.

Claim 1 is amended to recite in part a field-of-regard broadening structure, previously recited in claim 4. Claim 4 was not rejected on this ground, and therefore Applicant believes that claims 1-3 are allowable over the teachings of the references.

Ground 2. Claims 4-10 are rejected under 35 USC 103 over Roberson '088 in view of Mansell '123, and further in view of Popovich US Patent 6,353,489.. Applicant traverses this ground of rejection.

Claim 1 is amended in two primary ways. First, it is now limited to an infrared light transceiver. Second, a field-of-regard broadening structure operable in the infrared is now recited. The field-of-regard broadening structure provides a field of regard of the output light beam of greater than 90 degrees.

Claim 1 recites in part:

> a field-of-regard broadening structure overlying the controllable light reflector; wherein the field-of-regard broadening structure is operable in infrared wavelengths to provide a field of regard of the output light beam of greater than 90 degrees relative to the controllable

light reflector;

None of the references teaches any structure that broadens the field of regard to greater than 90 degrees. None of references teaches any structure that provides a field of regard of the infrared output light beam of greater than 90 degrees.

The explanation of the rejection in the paragraph bridging pages 4-5 does not mention the infrared limitation, because the infrared limitation was not recited in the prior version of claim 1. The explanation of the rejection pointed to Popovich as teaching the "field-of-regard broadening structure". Popovich cannot be relied upon for that teaching in regard to the amended claim 1. Popovich's structure and teachings are limited to visible light (col. 4, lines 61-62; col. 5, lines 55-56), because Popovich's holographic diffraction devices are specifically configured to controllably diffract the red, blue, and green components of visible light (col. 3, line 21-col. 4, line 7; col. 60, lines 61-62). That is the reason that the holographic diffraction devices are stacked and configured in the manner illustrated.

The explanation of the rejection argued in that same paragraph bridging pages 4-5 that Popovich teaches a field-of-regard broadening structure, referencing several locations in Popovich. Neither these locations nor any other portions of Popovich or the other references teaches a "field-of-regard broadening structure" or any structure that is taught to increase the field of regard to greater than 90 degrees. Popovich teaches holographic diffraction devices that controllably either do not alter the light beam, or diffract the light beam at a certain angle of diffraction that is not taught to be greater than 90 degrees (col. 3, line 21-col. 5, line 7). All holograms are not the same. Popovich selected holograms to perform the indicated function in individual visible light components, while Applicant chose holograms (such as those of Figures 5-7) to provide a field of regard of the output light beam of greater than 90 degrees.

Regarding claim 9, none of the references teach the specific types of holograms recited. Popovich has no teaching of a holographic diffraction device that increases the field of regard.

Ground 3. Claims 11-22 are rejected under 35 USC 103 over Roberson '088 in view of Popovich '489.. Applicant traverses this ground of rejection.

Claim 11 recites in part:

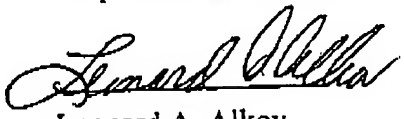
"the controllable light reflector reflects over a field of regard of greater than 90 degrees relative to the controllable light reflector"

The explanation of the rejection found on page 6 of the Office Action argues that Popovich has such a teaching. A careful study of Popovich reveals that it has no such teaching, nor do the other references. If the rejection is maintained, Applicant asks that the Examiner point out specifically where this limitation is said to be taught in the references.

Popovich has designed his holographic diffraction devices for a specific purpose of controllably diffracting the red, green, and blue components of visible light, as discussed at col. 3, line 21-col. 4, line 7. There is no teaching that these holographic diffraction devices could be used for any other purposes, and specifically that they could increase the field of regard to greater than 90 degrees.

Applicant asks that the Examiner reconsider and withdraw the rejections.

Respectfully submitted,



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